CLAIMPTO

WNP

12/10/2004

22. (currently amended) An isolated polynucleotide consisting of a nucleic acid sequence encoding an amino acid sequence ~~identical to, except for up to five amino acid alterations per 100 amino acids, the amino acid sequence~~ consisting of SEQ ID NO:56.

23. (previously presented) An isolated polynucleotide consisting of the full complement of the nucleic acid sequence of claim 22.

25. (previously presented) The isolated polynucleotide of claim 22 which is fused to a heterologous polynucleotide sequence.

26. (previously presented) The isolated polynucleotide of claim 25, wherein said heterologous polynucleotide sequence encodes a polypeptide.

27. (previously presented) A method of making a recombinant vector comprising inserting the isolated polynucleotide of claim 22 into a vector.

28. (previously presented) A recombinant vector comprising the isolated polynucleotide of claim 22.

29. (previously presented) The recombinant vector of claim 28, wherein said polynucleotide is operably associated with a hererologous regulatory sequence that controls gene expression.

30. (previously presented) A recombinant host cell comprising the isolated polynucleotide of claim 22.

31. (previously presented) The recombinant host cell of claim 30, wherein said polynucleotide is operably associated with a hererologous regulatory sequence that controls gene expression.

32. (previously presented) A method for producing a polypeptide, comprising:

(a) culturing a recombinant host cell comprising the isolated polynucleotide of claim 22 under conditions suitable to produce a polypeptide encoded by said polynucleotide; and

(b) recovering the polypeptide.

34. (currently amended) An isolated polynucleotide consisting of a nucleic acid sequence encoding an amino acid sequence consisting of a portion of the amino acid sequence of SEQ ID NO:56 ~~which specifically binds an antibody that specifically binds to a polypeptide consisting of the amino acid sequence of SEQ ID NO:56~~, wherein said portion ~~comprises an amino acid sequence~~ is selected from the group consisting of:

(a) Arg-10 to Arg-17;

(b) Lys-29 to Ser-39;

(c) Ser-140 to Ala-153,

(d) Arg-158 to Tyr-169;

(e) Asp-175 to Ala-183;
(f) Gly-216 to Asn-236;
(g) Ala-261 to Leu-270;
(h) Arg-282 to Phe-291;
(i) Thr-297 to Ala-305;
(j) Pro-342 to Gln-362;
(k) Phe-455 to Asp-463;
(l) His-497 to Thr-511;
(m) Ala-521 to Gly-529;
(n) Ile-537 to Val-546;
(o) Ile-556 to Ala-568;
(p) Pro-581 to Ser-595;
(q) Glu-670 to Ala-685;
(r) Ser-696 to Ala-705; and
(s) Leu-782 to Ser-791.

35. (previously presented)The isolated polynucleotide of claim 34 which is fused to a heterologous polynucleotide sequence.

36. (previously presented)The isolated polynucleotide of claim 35, wherein said heterologous polynucleotide sequence encodes a polypeptide.

37. (previously presented)A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim 34 into a vector.

38. (previously presented)A recombinant vector comprising the isolated polynucleotide of claim 34.

39. (previously presented)The recombinant vector of claim 38, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.

40. (previously presented) A recombinant host cell comprising the isolated polynucleotide of claim 34.

41. (previously presented) The recombinant host cell of claim 40, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.

42. (previously presented) A method for producing a polypeptide, comprising:

(a) culturing a recombinant cell comprising the isolated polynucleotide of claim 34 under conditions suitable to produce a polypeptide encoded by said polynucleotide; and

(b) recovering the polypeptide.

43. (currently amended) An isolated polynucleotide consisting of a nucleic acid sequence encoding an amino acid sequence consisting of a portion of SEQ ID NO:56, wherein said portion is at least [[9]] 30 contiguous amino acid residues in length ~~of SEQ ID NO:56~~.

45. (currently amended) The isolated polynucleotide of claim 43 [[44]], wherein said portion is at least 50 contiguous amino acid residues in length ~~of SEQ ID NO:56~~.

46. (currently amended) The isolated polynucleotide of claim 45, wherein said portion is at least 100 contiguous amino acid residues in length ~~of SEQ ID NO:56~~.

47. (previously presented) The isolated polynucleotide of claim 43, wherein said polynucleotide is fused to a heterologous polynucleotide sequence.

48. (previously presented) The isolated polynucleotide of claim 47, wherein said heterologous polynucleotide sequence encodes a polypeptide.

49. (previously presented)A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim 43 into a vector.

50. (previously presented)A recombinant vector comprising the isolated polynucleotide of claim 43.

51. (previously presented)The recombinant vector of claim 50, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.

52. (previously presented)A recombinant host cell comprising the isolated polynucleotide of claim 43.

53. (previously presented)The recombinant host cell of claim 52, wherein said polynucleotide is operably associated with a heterologous regulatory sequence that controls gene expression.

54. (previously presented)A method for producing a polypeptide, comprising:

(a) culturing a recombinant cell comprising the isolated polynucleotide of claim 43 under conditions suitable to produce a polypeptide encoded by said polynucleotide; and

(b) recovering the polypeptide.

66. (previously presented)An isolated polynucleotide consisting of a nucleic acid molecule selected from the group consisting of:

(a) SEQ ID NO:55; and

(b) the full complement of (a).

67. (previously presented) The isolated polynucleotide of claim 66 which is fused to a heterologous polynucleotide sequence.

68. (previously presented) A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim 66 into a vector.

69. (previously presented) A recombinant vector comprising the isolated polynucleotide of claim 66.

70. (previously presented) A recombinant host cell comprising the isolated polynucleotide of claim 66.

78. (previously presented) An isolated polynucleotide consisting of at least 50 contiguous nucleotides of a nucleic acid sequence selected from the group consisting of:

(a) SEQ ID NO:55; and

(b) the full complement of (a).

79. (previously presented) The isolated polynucleotide of claim 78, wherein said nucleic acid sequence is (a).

80. (previously presented) The isolated polynucleotide of claim 78, wherein said nucleic acid sequence is (b).

81. (currently amended) The isolated polynucleotide of claim 78, ~~wherein said polynucleotide comprises~~ which is fused to a heterologous polynucleotide sequence.

82. (previously presented) A method for making a recombinant vector comprising inserting the isolated polynucleotide of claim 78 into a vector.

83. (previously presented) A recombinant vector comprising the isolated polynucleotide of claim 78.

84. (previously presented) A recombinant host cell comprising the isolated polynucleotide of claim 78.

18. (withdrawn) A method of detecting *Streptococcus* nucleic acids in a biological sample obtained from an animal involving assaying for one or more nucleic acid sequences encoding *Streptococcus* polypeptides in a sample comprising:

(a) contacting the sample with the isolated polynucleotide of claim ~~55~~ 78, under conditions such that hybridization occurs, and

(b) detecting hybridization of said polynucleotide to the one or more *Streptococcus* nucleic acid sequences present in the biological sample.